

IN THE TITLE

Please amend the title as follows:

-- **CACHE FLUSH BASED ON CHECKPOINT TIMER** --.

IN THE SPECIFICATION

Please amend the specification as follows:

Please replace paragraphs [0016] and [0017] with the following rewritten paragraphs as follows:

-- [0016] Turning now to Fig. 4, the flow of a write request process by the cache controller 110 will be described. By scanning the file manager 51 of cache management table 117 to retrieve a file at 501 coincident with a file designated by a write request 104, a cache pointer at 506 is acquired (step 401). Then, a cache management entry 53 corresponding to write data is retrieved by collating them with each other (step 402) and if a cache management entry 53 corresponding to the write data is hit, the program proceeds to the next step, but if any cache management entry 53 corresponding to the write data is not hit (step 403), a new cache management entry 53 and a cache memory page are secured and a list of the cache management entry 53 is maintained (step 404). Subsequently, if a mode designated during the write request 104 is write after, the program branches to step 406 (step 405) and the write data undergoes cache write 114 so as to be written to the cache memory 120 (step 406), the cache management entry 53 is changed to ~~unreflected~~reflected at 514 (step 408) and the program proceeds to step 410. On the other hand, if the mode designated during the write request 104 is write through, the program branches to step 407 (step 405), so that the write data undergoes cache write 114 so as to be written to the cache memory 120, and a medium write 116 is applied to the memory medium 130 (step 407). Then, the cache management entry 53 is changed to reflected at 514 (step 409) and the program proceeds

to step 410. If the collation of all write data with the cache management entry 53 is not completed, the program returns to the collation retrieval, but if completed, the program proceeds to the next step (step 410), and the mode designated during the write request 104 is set at mode 505 (step 411), thus ending the write request process.

[0017] As described above, even in the event that a fault causing the contents of the cache memory of storage unit to be lost takes place, it can be guaranteed that update contents of the application program prevailing up to the synchronous timing (~~check-point~~checkpoint or commitment) can be written in the memory medium and, therefore, in the recovery process of the application program after the occurrence of the fault, the recovery start can be determined accurately. --